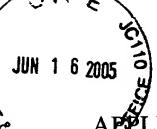
Docket No: SATC-005 (033225-000008)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

LICANT:

Wright et al

SERIAL NO.:

09/649,479

CONFIRMATION No. 8426

FILING DATE:

Aug 28, 2000

TITLE:

Gun-only Magnet Used for a Multi-stage Depressed Collector

Klystron

PATENT NO.:

6,777,877 1

Certificate

ISSUED:

Aug 17, 2004

JUN 2 0 2005

EXAMINER:

Benny T. Lee

of Correction

ART UNIT:

2817

CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450, on the date printed below:

Date: June 14, 2005

Name:

Penelope Sherman

Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

TRANSMITTAL FOR CERTIFICATE OF CORRECTION

We enclose, pursuant to the provisions of 37 C.F.R. §1.322 and §1.323, a Certificate of Correction for United States Patent No. 6,777,877. Please make the Certificate of Correction and the statements herein of record.

The corrections made to the above-identified United States Patent in the Certificate of Correction filed herewith are to correct mistakes which are of a minor character according to 35 U.S.C. §255 and 37 C.F.R. §1.323. The proposed corrections do not constitute such changes in the patent as would constitute new matter or would require

06/17/2005 DEMMANU1 00000015 6777877

re-examination.

37 C.F.R. §1.322 Corrections

Please see of attached Certificate of Correction number(s) 1-4.

37 C.F.R. §1.323 Corrections

Please see of attached Certificate of Correction number(s) 5.

Fee Under 37 C.F.R. §1.20(a)

A check in the amount of \$100.00 is enclosed pursuant to 37 C.F.R. §1.20(a) for corrections made pursuant to 37 C.F.R. §1.323 to correct mistakes other than by the office.

Respectfully submitted, THELEN REID & PRIEST, LLP

Dated: June <u>9</u>, 2005

David Ritchie Reg. No. 31,562

THELEN REID & PRIEST, LLP P.O. Box 640640 San Jose, CA 95164-0640 (408) 292-5800

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO: 6,777,877 61

DATED: Aug 17, 2004

INVENTOR(S): Wright et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

- 1) In Column 6 line 62 before the magnetic field, replace "provided by" with --from--.
- 2) In Column 6 line 62 after the magnetic field replace "from" with --provided by--.
- 3)In Column 7 line 1 after The vacuum electron device of claim 1 wherein said insert --region--.
- 4) In Column 7 line 2 after said collector delete "a region".
- 5) In Column 8 line16 replace "electron." with --electrons.--.

MAILING ADDRESS OF SENDER:

Thelen Reid & Priest P.O. Box 640640 San Jose, CA 95164-0640

PATENT NO. 6,777,877 ()1

No. of additional copies



This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006, OMB 0651-0032 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). FEE TRANSMITTAL for FY 2005		Complete if Known		
		Application Number	09/649,479	
		Filing Date	Aug 28, 2000	
		First Named Inventor	Wright et al	
Applicant claims small entity status. See 37 CFR 1.27		Examiner Name	Benny T. Lee	
TOTAL AMOUNT OF PAYMENT	(\$) 100	Art Unit	2817	
		Attorney Docket No.	SATC-005 (033225-000008)	
METHOD OF DAVIMENT (ale and	- 10 41 4 1 - 2			

METHOD OF PAYMENT (check all that apply)							
☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):							
☐ Deposit Account Deposit Account Number: 50-1698 Deposit Account Name: Thelen Reid & Priest							
For the above-ide	entified depo	sit account, the Direc	ctor is hereb	– y authorized to: (che	ck all that ap	ply)	
☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee							
Charge any additional fee(s) or underpayments of fee(s) Credit any overpayments							
Under 37 CFR 1.16 and 1.17 WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.							
FEE CALCULATION	1011 P 1 O-2030	.			·	• • •	
1. BASIC FILING, SEA	RCH. AND	EXAMINATION	FEES				
	FILING F	EES	SEARCI		EXAMINA	ATION FEES	·
Application Type	Fee (\$)	Small Entity	Fee(\$)	Small Entity Fee(\$)		Small Entity	Fees Paid (\$)
Application Type Utility	300	<u>Fee(\$)</u> 150	<u>ree(\$)</u> 500	250	<u>Fee(\$)</u> 200	<u>Fee(\$)</u> 100	rees raid (\$)
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
2. EXCESS CLAIM FEES Small Entity							
Fee Description Fee (\$)					Fee (\$)		
Each claim over 20 (including Reissues) 50 25 Each independent claim over 30 (including Reissues) 200 100					25 100		
Multiple dependent cla	•	cruding icessues)				360	180
Total Claims	Extra C	laims Fee(\$)	<u>Fe</u>	e Paid (\$)		<u>Multiple l</u>	Dependent Claims
20 or HP= x = <u>Fee (\$)</u> <u>Fee Paid (\$</u>					Fee Paid (\$)		
HP = highest number of	·			D : 1 (A)			
Indep. Claims	<u>Extra Cl</u>			ee Paid (\$)			
3 or HP= x = HP = highest number of independent claims paid for, if greater than 3.							
3. APPLICATION SIZE FEE							
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer							
listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$)							
100 = / 50 = (round up to a whole number) x =							
4. OTHER FEE(S) Fees Paid (\$)							
Non-English Specification, \$130 fee (no small entity discount)							
Other (e.g., late	Other (e.g., late filing surcharge): 6212 37CFR 1.20(a)				<u>100</u>		

SUBMITTED BY	\		T	
Signature	NV	Registration No. (Attorney/Agent) 31,562	Telephone	(408)292-5000
Name (Print/Type)	David Ritchie		Date	June 9 , 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

GERTIFICATE OF CORRECTION

PATENT NO : 6,777,877 81

DATED: Aug 17, 2004

INVENTOR(S): Wright et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

- 1) In Column 6 line 62 before the magnetic field, replace "provided by" with --from--.
- 2) In Column 6 line 62 after the magnetic field replace "from" with --provided by--.
- 3)In Column 7 line 1 after The vacuum electron device of claim 1 wherein said insert --region--.
- 4) In Column 7 line 2 after said collector delete "a region".
- 5) In Column 8 line16 replace "electron." with --electrons.--.

MAILING ADDRESS OF SENDER:

Thelen Reid & Priest P.O. Box 640640 San Jose, CA 95164-0640

PATENT NO. 6,777,877 B

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Application/Control Number: 09/649,479

01P Act Unit: 2817

JUN 1 6 2005

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the change additions be unacceptable to applicant, an amendment may be filed as provided by 17 and 1.312. To ensure consideration of such an amendment, it MUST be submitted no later to payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview.

Masako Ando on 12 & 17 March 2004.

The application has been amended as follows:

In the Claims:

In claim 1, line 11, "from" has been changed to --provided by--.

In claim 2, line 2, "collector is defined by a" has been deleted and "which" has been deleted and replaced by --of said collector--

Cornections 1+2

In claim 3, line 1, "is" has been deleted and replaced with --region--; line 2, "from said magnet such that" has been deleted and replaced by --causes-- and "evenly disperses on" has been rephrased as --to evenly disperse in--.

In claim 4, line 10, "the body of" has been deleted and --arrangement-- has been inserted after the second occurrence of "magnet"; lines 12, 13, --multi-stage depressed-- has been inserted prior to "collector" at each occurrence and "region" has been deleted at each occurrence.

In claim 5, line 3, --due to said multi-stage collector having substantially no magnetic field reversal,-- has been inserted prior to "thereby"; lines 3, 4, "due to magnetically focused electrons" has been deleted and replaced by --within said internal chamber--.





UNITED STATES DEPARTMENT United States Patent and Trouble Address: COMMISSIONER OF PATENTS AND TWESTINGTON, D.C. 20231

APPLICATION NUMBER

FILING DATE

FIRST NAMED APPLICANT

ATTORNEY DOGGE

DANHAR ART UNIT

DATE MAILED:

This is a communication from the examiner in charge of this application. COMMISSIONER OF PATENTS AND TRADEMARKS

All claims being allowable PROSECUTION ON THE MEDITO IC (OR RESAME) OF COURT A MICE
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course. NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from Issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment filed I become Zoo3. The allowed claim(s) is/are
Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 □ All □ Some* □ None of the: □ Certified copies of the priority documents have been received. □ Certified copies of the priority documents have been received in Application No. □ □ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
*Certified copies not received:
Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE FOR SUBMITTING NEW FORMAL DRAWINGS, OR A SUBSTITUTE OATH OR DECLARATION. This three-month period for complyin with the REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL is extendable under 37 CFR 1.136(a).
Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
Applicant MUST submit NEW FORMAL DRAWINGS
because the originally filed drawings were declared by applicant to be informal.
including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No, which has been approved by the examiner.
including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
☐ including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
☐ including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
☐ including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
☐ including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
 including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
 including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No

PTOL-37 (Rev. 11/00)



Address: COMMISSIONER OF Washington, D.C. 80

APPLICATION NUMBER FILING DATE FIRST NAMED APPLICANT

ART UNIT

AFTUR

DATE MAILED:

INTERVIEW SUMMARY

All participants (applicant, applicant's representative, PTO personnel):	
(1) Benny Lee (PTO) (3)	
(2) Masako Ando (4)	
Pate of Interview 12,17 March 2004	
Type: Telephonic Televideo Conference Personal (copy is given to applicant applicant's represent	latíve)
Exhibit shown or demonstration conducted: Yes No If yes, brief description:	N. Saffaya
	The second of th
Agreement was reached. was not reached.	The state of the s
Claim(s) discussed:	
Identification of prior art discussed:	and the second s
	25.4 miles
Quescription of the general patters of what was a live to	
Carifying change to if an agreement was reached, or any other comments:	
A DOUG CONTROL MILLION	plicants
representative by the Examiner and specific claim amon	dments
were agreed to such as to place the application in condi	tion for
allowance. See a companying Examiners amendment	
(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render to must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summattached.)	the claims allowable nary thereof must be
It is not necessary for applicant to provide a separate record of the substance of the interview.	

Examiner Note: You must sign this form unless it is an attachment to another form.

Unless the paragraph above has been checked to indicate to the contrary. A FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office

action has are ready been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE

SUBSTANCE OF THE INTERVIEW.

JUN 1 6 2005

Appl. No. 09/649,479 Amdt. dated: November 24, 2003

Reply to Office Action of: May 23, 2003



This listing of claims will replace all prior versions, and listings of claims in the

application:

LISTING OF CLAIMS

1. (Currently Amended) A high power output vacuum electron device comprising: a cathode for emitting a supply of electrons,

an anode for attracting said electrons, said anode having a configuration to allow said electrons to pass through said anode,

an RF generator circuit in the path of said electron beam for generating RF signal energy in the presence of a high-voltage power source,

a magnet including a magnet pole piece surrounding said anode and said RF generation circuit for focusing said electrons into a collimated beam, and

a collector for receiving the collimated electron beam and for returning the

electrons to the cathode, said collector is a multi-stage depressed collector which is

shielded from the magnetic field from said magnet,

wherein said magnet includes no magnet pole piece in the vicinity of a region of said collector, a magnetic material surrounding the collector region being disposed such that substantially no magnetic field reversal is present at the collector region.

2. (Previously Amended) The vacuum electron device of Claim 1 wherein said collector is defined by a region which is free of any magnetic fields such that the electron beam naturally disperses to evenly deposit said electrons on inner walls of said collector, said collector being thereby free of hot spots due to uneven electron deposition thereon.

ppl. No. 09/649,479 Amdt. dated: November 24, 2003 Reply to Office Action of: May 23, 2003

3. (Original) The vacuum electron device of Claim 1 wherein said collector/is free of magnetic flux reversals from said magnet such that the electron beam evenly disperses on in said collector.

A vacuum electron device including a source of electrons, 4. (Previously Amended) said electrons being configured into a narrow beam, and a multi-stage depressed collector for collecting said electrons, the improvement comprising:

a magnet arrangement surrounding and focusing said narrow beam, the magnetic flux of said magnet arrangement being parallel to and collinear with the centerline of said electron beam, said magnet arrangement having a first open pole piece adjacent to the area of said source of electrons to initially focus said electron beam, and a second open pole piece along said centerline to focus and drive said electron beam, said magnet having no open magnet pole piece in the vicinity of said multi-stage depressed collector so that any magnetic flux from the magnet is directed back into the body of said magnet and multi-staly egum

a magnetic material surrounding the collector region such that substantially no magnetic field reversal is present at the collector region.

The vacuum electron device of Claim 4 wherein said multi-5. (Previously Amended) stage depressed collector includes an internal chamber, said electrons evenly dispersing within said internal chamber thereby eliminating any hot spots due to magnetically lectrons]

No magnots frein verens in the sail in the not chart happens hands.

No magnots frein verens el, focused electrons?

Appl. No. 09/649,479 Amdt. dated: November 24, 2003 Reply to Office Action of: May 23, 2003

6. ((Previously Amended) The vacuum electron device of Claim 5 wherein each of

(said) stages is connected to a different high-voltage supply such that electrons of different of said mut stay dipp. Culle the

kinetic energies will impinge on the associated depressed collector.

V stage of the MS

7. ((Previously Amended) A gun only magnet utilized in a multi-stage depressed collector high-energy vacuum electron device comprising:

a first pole piece region generating magnetic flux adjacent a cathode of said vacuum electron device to drive and initially focus electrons emitted from said cathode, a second pole piece region providing magnetic flux along the path of electrons to focus said electrons into a narrow beam, said magnet having no pole magnet piece in the region of said vacuum electron device where the electrons are collected and returned to said cathode, and

a magnetic material surrounding the collector region such that substantially no magnetic field reversal is present at the collector region.

- 8. (Previously Presented) The vacuum electron device of Claim 1 wherein the magnetic field includes a refocusing region in vicinity of an entrance to said collector region.
- 9. (Previously Presented) The vacuum electron device of Claim 4 wherein said magnet arrangement further generates a refocusing magnetic field in vicinity of an entrance to said collector region.

0



BEST AVAILLABLE COPY

Serial/Patent.No.: 09/649,479	Filing/Issue Date: 8/28/00
TY WELL AND A COL	
Applicant: Edward L. Wright et al.: Title: GUN-ONLY MAGNET USED FOR A MULTI-STAGE D	EPRESSED COLLECTOR KLYSTRON
TRIE. GOIV-GIVET IMMO-	
TRP Docket No.: SATC-005	Atty/Secty Initials: DBR/MA/ /cd
D Mailade 11/24/03	Docket Due Date: 11/24/03
The following has been received in the U.S. Patent & Trademar	k Office on the date stamped hereon:
(0)	☐ IDS & PTO 1449 (pgs.)
	Pieces of Prior Art Enclosed
Application - Utility (pgs. with cover & abstract)	☐ Issue Fee Transmittal
Application - Rule 1.53(b) Continuation (pgs.)	☐ Submission of Formal Drawings:
Application – Rule 1.53(b) Division (pgs.)	# of sheets includes figures
Application – Rule 1.53(b) CIP (pgs.)	☐ Notice of Appeal
D 1-1 52(4) CDA (pgs	
Application – PCT (pgs.)	Preliminary Amendment (pgs.)
Application - Provisional (pgs)	Reply Brief (pgs.)
	Req and Cert. Not to Publish – Rule 1.213
Assignment and Cover Sneet Certificate of Correction DEC 0 1 2003	Request for Continued Examination (RCE) (pgs.)
☐ Certificate of Gailing	Request for Extension of Time 3 Month(s)
Declaration & POA (pgs.)	Response to Notice to File Missing Parts
▼ Fee Transmittal	☐ Copy of PTO Notice to File Missing Parts
Drawings (informal):	☐ Transmittal Letter
# of sheets includes figures	Express Mail No.:
Other:	□ Check(s) \$1,060.
Company State Per 6 645 000 & 6 211 657: Terminal Disc.; Sunt. of Assignee	Deposit Acct. No. 50-1698 \$
11/24/03; Copy of Not. of Rec., Cover Sheet & Assign S.N. 09,649,479 3/9/01; Copy of Not. of Rec., Cover Sheet & Assign S.N. 09/668,008 3/21/01;	Patent Code: 1814/1253
LR37CFR § 10.9(b); & Affidavits of Inv.'s E. Wright & R. Dobbs	Client/Matter # <u>033225 - 8</u>